PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE CONVERSION OF THE EXISTING ICB (INTERSECTION CONTROL BEACON) TO A PART-TIME TRAFFIC SIGNAL AT THE INTERSECTION OF MD 65 (SOUTH POTOMAC STREET) AND SOUTH HAGERSTOWN HIGH SCHOOL IN WASHINTON COUNTY, MARYLAND. MD 65 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

DURING NORMAL OPERATION, THE INTERSECTION WILL OPERATE IN A FLASHING MODE WITH THE MD 65 INDICATIONS FLASHING YELLOW AND THE SOUTH HAGERSTOWN HIGH SCHOOL EXIT INDICATIONS FLASHING RED. WHEN ACTIVATED, THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC ACTUATED MODE WITH THE MD 65 APPROACHES OPERATING CONCURRENTLY AND THE SOUTH HAGERSTOWN HIGH SCHOOL EXIT OPERATING ALONE.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT PHASE CONTROLLER AND INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.

INSTALL VIDEO INTERFACE EQUIPMENT IN THE PROPOSED POLE MOUNTED CABINET AND CONTROLLER.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAYBE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.02-01 (SHOULDER WORK)

STANDARD NO. MD-104.02-03 (LANE SHIFT)

STANDARD NO. MD-104.02-14 (INTERSECTION FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

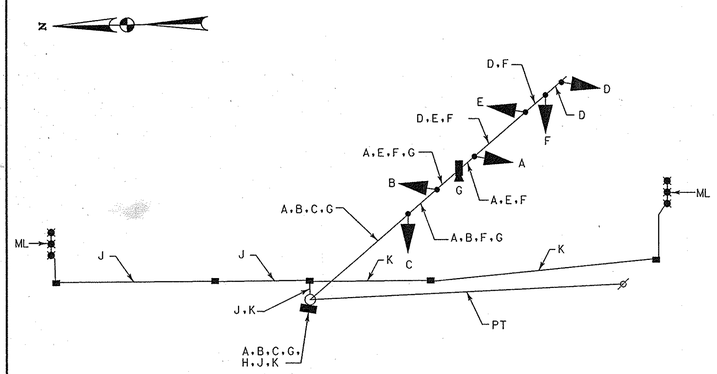
MR. GEORGE H. SMALL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 729-8444

MR. GEORGE FRANKENBERRY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 729-8457

MR. DAVID LARRICK
DISTRICT UTILITY ENGINEER
PHONE: (301) 729-8420

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

WIRING DIAGRAM



WIRING KEY

A, B, C } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

D, E, F } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

G } VIDEO CAMERA DETECTION LEAD-IN CABLE

J, K } MICROLOOP PROBE LEAD-IN

ML - MICROLOOP PROBE LEAD-IN

PT - PROPOSED OVERHEAD TELEPHONE SERVICE

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
* 9000	1 EACH	70 FT. MAST ARM WITH FLANGE BOLTS
9016	1 EACH	FOUR CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
9043	1 EACH	EIGHT PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER AND INTERSECTION MONITOR WITH BATTERY BACK-UP HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	39 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
		- 2 EACH W3-3 SIGN (36 IN. x 36 IN.) NEW GROUND MOUNT
		- 2 EACH S2-1 SIGN (36 IN. x 42 IN.) - MAST ARM MOUNT

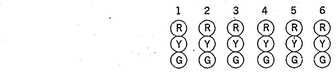
* HELD IN SIGNAL YARD (SHA)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

PHASE CHART



NORMAL OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R
PHASE 2 AND 6	G	G	G	G	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	R	R
PHASE 4	R	R	R	R	G	G
4 CHANGE	R	R	R	R	Y	Y

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
5002	230 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5005	80 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	18 EACH	12 INCH LED SIGNAL HEAD SECTION
8011	1 EACH	CONDUIT BEND IN EXISTING FOUNDATION
8013	1 EACH	INSTALL STTEEL STRAIN POLE OR MAST ARM POLE
8020	2 EACH	MICROLOOP PROBE (ANY LENGTH) LEAD IN CABLE UP TO 1000 FT.
8022	1 EACH	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8027	1 EACH	VIDEO DETECTION CAMERA AND CABLE
8028	4 L.F.	1 INCH DETECTOR SLEEVE GALVANIZED OR FLEXIBLE LIQUID TIGHT
8036	490 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8037	130 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8040	39 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8042	60 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8048	5 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8057	70 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8058	260 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8064	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT

SHA: NO: WA337A51/C51
TOD NO: AX142-06
MD 65 @ SOUTH
HAGERSTOWN HIGH SCHOOL

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 65 and South Hagerstown High School

Hagerstown, MD

SIGNALIZATION PLAN

SCALE NONE DATE 5/31/2007 CONTRACT NO. AX1425185

DESIGNED BY B. DONOWAY
DRAWN BY B. DONOWAY
CHECKED BY N. LEARY
FAP NO. SEE TITLE SHEET

COUNTY WASHINGTON
LOGMILE 21006511.56
TIMS NO. 1488
TOD NO.

TS NO. 2612A | DRAWING TSP-2 OFTSP-2 | SHEET NO. 2 OF 2

Whitman, Requardt and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

PLOTTED: 06-05-2007
FILE: n:\31555-108\CADD\pSG-N002_md65.dgn

BY: sbloss